The Repeater

The W6VVR Newsletter

The Newsletter for March 2024

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THE VACA VALLEY RADIO CLUB WELCOMES YOU

The Vaca Valley Radio Club has proudly served the Northern Solano County Area since 1988. We pride ourselves in providing a friendly place for radio amateurs to meet and improve their operating skills.

We participate in public service events throughout the year and are always ready to assist with communications during times of emergency.

Browse our website for more information about our club. If you have any questions, please e-mail us at w6vvr@w6vvr.net or call 707-448-5665 for assistance.

The Repeater is Published by the Vaca Valley Radio Club, PO Box 143, Elmira, CA 95625- 0143.

An ARRL Affiliated Club. Founded 1987, Chartered 1988.

General Meetings: 2nd Thursday of each month at 7:00 PM See the directions on the last several pages.

Meetings Are Wheelchair Accessible

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A Message from The Editors of The Repeater

Now that March has arrived, the thoughts turn to, ……NOPE!, Not March Madness, but warming weather, being outside, getting your yard ready for……..ANTENNAS!

Thats right! It is time to decide about what antennas you might want to put up if space allows for it.

Perhaps is a simple dipole or a monster beam but now that the weather is changing to drier days your thoughts should be moving to antennas and thoughts of Field Day.

This episode is going to be full of ideas for antennas and plans for antennas even an inexperienced builder can make.

And with thoughts of antennas it is also time to think of what antennas to use for field day. After all June is only 4 months away.

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A Message from The President

Unfortunately, as of the publishing deadline, I did not receive any message from the President Servando Miramontes, K6SRV

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A message from the Vice President

Unfortunately, as of the publishing deadline, I did not receive any message from the Vice President Dan Martin N6ETR

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A message from the Treasurer

Hi members, here's where we stand as we approach the end of February.

VACA VALLEY RADIO CLUB NOTES 2024					
		PROJECT FUND	REPTR FUND	TOTAL FUNDS	NON-DED FUNDS
2023 Forward		616.00	2582.09	3170.58	-27.51
YTD Received		0.00	108.00	871.41	763.41
YTD Paid		0.00	0.00	395.68	395.68
YTD Funds		616.00	2690.09	3646.31	340.22

As you can see the non-dedicated funds are out of the hole they showed last month and rebounding nicely.

I've been trying to be timely with the membership renewal notices. Please renew or contact me to let me know of any problems you may be having with the renewal process. Some of you are renewing via USPS mail, let me know if that is the case. I haven't been able to get to the club PO Box as often as I like, so acknowledging your renewal may take a little longer.

Submitted,

Bryan, KBØA

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A Message from the Secretary

Unfortunately, as of the publishing deadline, I did not receive any message from the Secretary
Mike Rogers KN6MIO

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Meetings recorded by the Secretary

02/08/2024
Vaca Valley Radio Club
Monthly Meeting

I. Pledge of Allegiance: Dan
II. Art Shared His Experiences At Quartzfest 2024.
III. Steven needs help with newsletter content.
IV. Dan says we will begin doing license testing.
V. Summer field day will be on the last full weekend of June (6/21 -23).
VI. Our next meeting's presentation may be about Go Kits.
VII. Fred gave a presentation about Raspberry Pi used for digital radio communication.

Adjourned: 8:10 p.m.

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Let’s talk about Antennas!

Which do you feel is the most important part of a radio station?

Is it that fancy rig costing thousands of dollars?

Is it the coax that gets the signal from the radio to the antenna?

Or is it the antenna itself?

Any amateur radio operator knows that the antenna is the most important part of his station.

Why?

Without an antenna; that radio isn't going to hear anything. And if you cant hear someone, how can you work them? And also remember; if the antenna isn’t tuned to a frequency you want to to transmit on it wont receive well on that frequency either.

Without the antenna, you wont be able to transmit into anything but a dummy load.

There are all sorts of antennas out there, verticals, dipoles, beams are just a few of the more common ones. There are Rhombic antennas, slot antennas even a few that claim to work but no one can figure out how.

When you make one, take into account the fact that different gauges of wire and tubing will have different band widths depending upon the diameter. For example a 14 gauge wire dipole only has a band width of about 100 kHz while a 12 gauge wire is about 150 kHz.

There are all sorts of programs and websites that will do the calculations for you.
If you look online at some websites, they have already done the calculations for you for most common antennas. All you have to do is follow the instructions.

If you want to try your hand at making your own antennas the best program for making, designing and modeling an antenna is called EZNEC. It is a bit difficult to use at first but once you start to use it you will wonder how people made antennas without it.

So lets start off with the simplest antennas you can make…

Continued on the next page.

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The Long Wire

Introducing the long wire antenna:

A long wire antenna is just what its name implies, a long length of wire up to a wavelength long. It does a reasonable job if you don't have a better antenna but requires a 9:1 balun to be able to match it to your radio. The impedance of the antenna is high so it does require a way to match it to your radio.

They make great antennas for S.O.T.A. (Summits on the air) and P.O.T.A. (Parks on the air) or even if you just want to use a radio while camping or perhaps an ecomm drill.

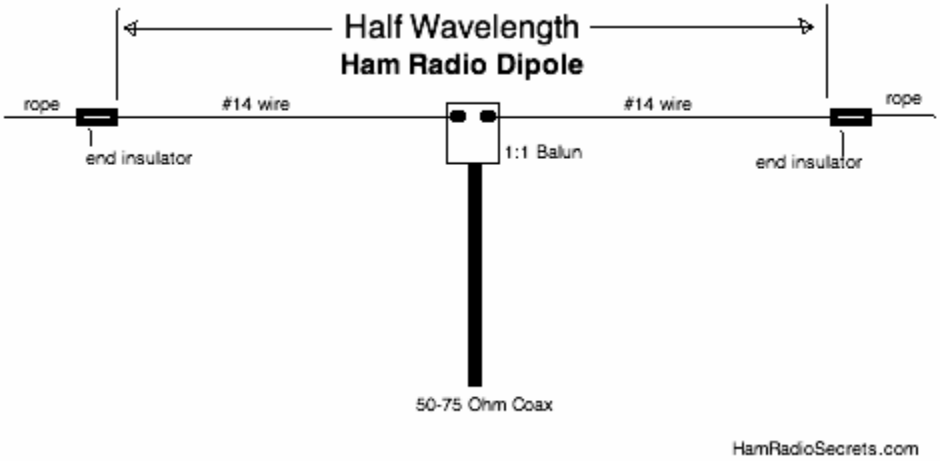
They can be made from a smaller gauge wire for weight at the expense of bandwidth but are a perfect antenna for being outdoors.

And if you live in an H.O.A. with antenna restrictions, you can probably put one up on the outside of your house along the gutters (if they are plastic) or at the peak of the roofto keep it hidden.

The Dipole

The next antenna on the list is the humble dipole.

A dipole is just as its name implies, a "di" meaning two and "pole" meaning poles, two poles. When one half of the antenna is electrically being the positive side the other half is being the negative side



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And even though it is a humble antenna, it does work very well. Just ask the hams who use them every day and make contacts from around the world. And as long as you remember the magic formulas of:

492/frequency
or
468/frequency

The 492/f formula is for an ideal antenna in free space, the 468/f is an estimate for real antennas at a reasonable height over ground.

You can make one at any time no matter where you are. These antennas can be made lightweight for S.O.T.A. and P.O.T.A., and even for ecomm use.

And if you live in an H.O.A. with antenna restrictions, you can probably put one up in your attic to keep it hidden.

Almost any wire can be used for a dipole even right to using the coax itself as both the coax and the antenna. People have used electrical zip-cord, slinkeys, whatever they have handy to make them.

Try your hand at making one of them you can do it in about an hour or two.

All in all they are a great antenna for the beginner and pro amateur radio operator.

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Beams

Now we will try to touch briefly on the beam antenna.

The picture above shows a 4 element Yagi antenna.

As its name implies a beam antenna “beams” the signal in the direction you point it at.

I am going to give a very simplistic explanation of a beam antenna called a yagi, but one that will work.

It was originally designed by two (2) Japanese radio operators Yagi, and Uda.

It can be made using just 2 or 3 elements up to a maximum of about 4 before efficiency tends to drop off.

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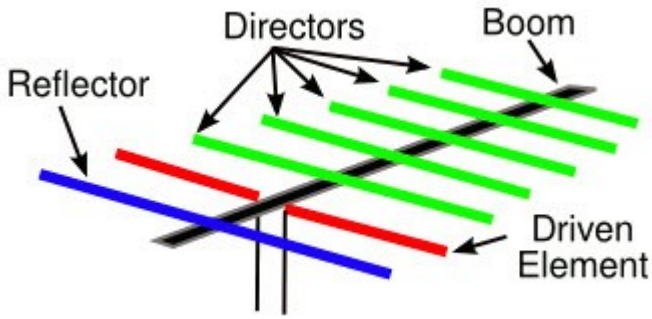
In this picture below, the elements are marked to make them easier to understand



Almost all antenna building instructions and descriptions start from the position of the reflector.

Located at the back of the antenna, an element called the “reflector”, (marked in blue), it is the second most important part of a beam antenna. It “reflects” the signal to the front of the antenna while also reducing the noise and signals from the rear of the antenna.

The reflector is about 0.05 % longer than the driven element. To get the length of the reflector, multiply using this formula: (468/f)*1.05.

The most important piece of the antenna is a dipole called the driven element (marked in red). This is the actual transmitting antenna of a beam. It is what is connected to your coax to your radio. You already know this formula 468/f.

It generally requires some capacitance to match it to the coax cable and transmitter. This is because in a beam antenna the inductance of the antenna is generally about 20-30 ohms instead of the typical 50 -75 ohms of a dipole due to the interaction with the other elements.

The spacing on both the reflector and driven element can affect the operation of the beam as well.

For a reflector it should be about 18%-20% of the FULL wavelength.

To calculate that spacing use (1005/f)*0.20

At its simplest, those 2 elements are all you need to make a bean antenna. (think of an emergency where you don’t have an antenna handy)

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You can add another element in front of the driven element called the “director”, (shown in green), which is about 0.05 % shorter than the driven element and “directs” the signal.

The formula for the first director is (468/f)*0.95.

You can add up to 5 directors, which help guide the signal coming off the driven element in the direction you want your signal to go. Each director added should be about 0.05% shorter than the one behind it. If you are using 1 director, it will improve the antenna efficiency by about 1db. If you add a second director it will add about 2db to the efficiency.

For the second director the formula is (468/f)*0.90.

Beyond 2 directors for hf, the improvement is only about 1db per director element.

For the director space each one about 15% of the wavelength from the driven element and each other (always starting from the previous element) again it will tend to work fairly well.

Beyond 20 meters, beam antennas can get extremely large.

Vertical antennas

Vertical antennas are nothing more than a dipole with one side sticking straight up in the air.

Vertical hf antennas are antennas that are 1/4 of a wavelength long. They generally are made out of aluminum tubing but you can just use a wire and a mast to make a vertical antenna. The vertical does still need the 1/4 wave opposite side like the dipole but the other side can be wires running along the ground away from the antenna in a circular pattern to act as a counterpoise.

For VHF and UHF mobile antennas, generally, a vehicle body is the “other half” of the antenna and acts as the ground plane.

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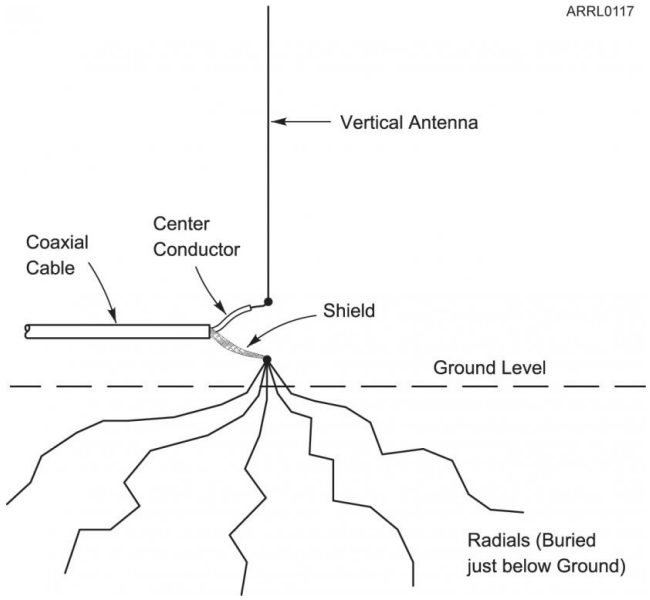
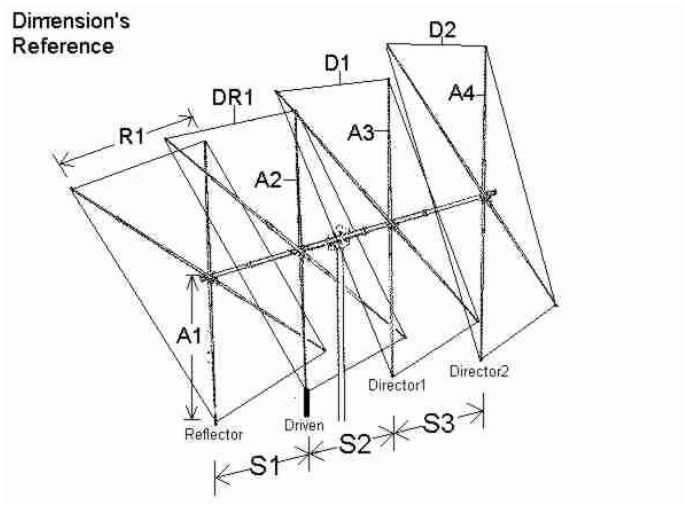
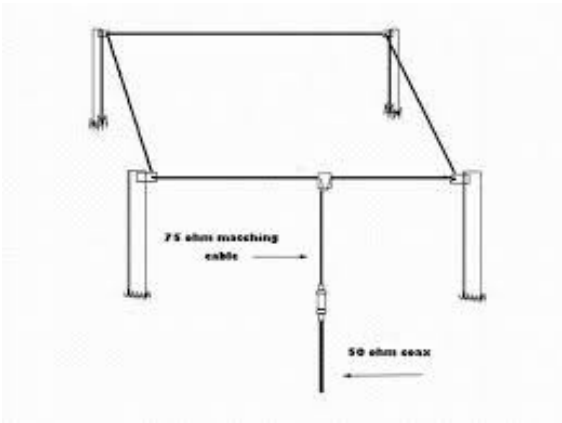


Quads and Deltas

A couple of other antennas you will hear mentioned frequently are full wavelength antennas, such as the Quad antenna, (4 sides) and the Delta antenna, (named because it has 3 sides and resembles the Greek letter Delta).



Quad antenna



Horizontal Quad

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Delta antenna

They are full wave antennas because they are made from a full wavelength of wire.

The formula to calculate a full wavelength is 1005/frequency

They can be reasonable to make at frequencies up to about 20 meters but tend to get super large at the lower frequencies. If you have the space to put one up horizontally, you can make one of them easily in an afternoon. They have the top of the triangle pointing to the ground.

Feedlines

All antennas need a way to get the RF from them and to them. This is called the feed line.

Coaxial cable is generally the most used feed line for amateur radio.
It is 50 ohm cable but you can use 75 ohm cable if you are willing to accept the slight mismatch

Coaxial cable comes in different sizes and frequency capabilities. The most common ones are

RG-8X, A thin coax cable. It works well up to about 50 MHz but then attenuates the signal quickly above that.

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RG-8, A thick coax cable again it works well up to about 50 MHz, it can be used to feed a 2 meter antenna but that is the top limit of it. The signal will be attenuated because of the frequency.

LMR240 a thick coax that works up to about 250MHz. It has lower loss than RG-8.

LMR400, A thick coaxial cable that will work up to the UHF frequencies. Again it has much lower losses than RG-8.

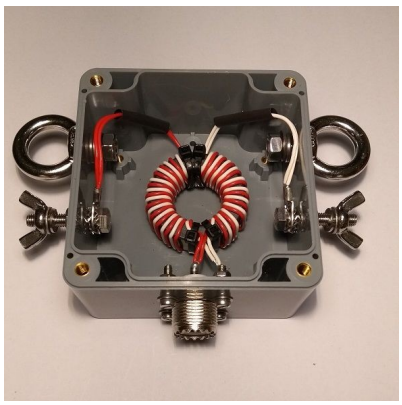
If you can afford it, always try to buy LMR400 since it has lower losses than RG-8 or RG-8X coaxial cable.

Baluns

Most antennas require a device called a balun on them to prevent rf energy from traveling back down the feed line into the shack. A burn from rf coming back into the shack is a very painful experience and you wont forget it if you ever get one.

Baluns can be made as simply as winding several loops of coax, (usually about 10 ft), around a pvc pipe. They can also be made using a torrid. You can buy them online as well, but with buying a pre-made one you don't have that sense of pride of you did it yourself.

Home made coax balun



Torrid balun

Pre made balun

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Antenna Tuners

One additional thing you will need for your antenna system is called a tuner. A tuner electrically alters the characteristics of what the radio sees from the antenna allowing it to match the antenna to the transmitter.

Lightning!!!

Yes we live in California but don’t forget to include lightning arrestors for **CLOSE** lightning strikes. We do actually get lightning in California more frequently that you would believe.

Notice I said “close” not “direct”, the only thing that will protect your appliances and electronic equipment from a direct lightning strike is it being packed in a box disconnected from the antenna and the power source.

All antennas should have a lightning arrestor installed on each antenna cable.

If you have multiple antennas, any antenna that is not being used should be connected to an earth ground whenever it is not in use, preferably placing a remote antenna switch as close to the antenna as possible for that capability.

And even with that done you still should earth ground your unused coax wire coming from the antenna before it comes inside your shack with another switch.

You want to isolate anything not being used at the time to ground outside of your house in case of a close lightning strike.

You should also ground your tower or mast even if it is only 10 feet off the ground.

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If you should suffer a direct lightning strike to your house, your antenna, or your PG&E or SMUD lines, the chances are that all your electronics will be destroyed. You should see if your home owners insurance has REPLACEMENT VALUE insurance or if it will even cover damage from lightning strikes. Most insurance agencies use a clause called “an act of God” to avoid paying for any damage to a house from a natural disaster.

Mast and towers:

All antennas do need height to work correctly but not everyone can put a 130 ft tower up in their back yard, (the height of an 80 meter half wave) but, you should try to get the antenna as high as you possibly can.

Check your local city ordinances for the tower or mast restrictions. Be aware they will sometimes consider a mast to be the equivalent of a tower. Most cities limit you to a 35 ft high mast or tower.

A great resource for antennas is the ARRL Antenna handbook. It is currently in its 25th revision. And cost about $80.00. it can be ordered from the ARRL Website.

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Some Basic Antenna Formulas

Some of the more obvious antenna formulas we use are:

For a Dipole : 492/frequency. (yes I know its supposed to be 468/frequency as I stated above, but by starting longer it gives you extra to work with when cutting it for tuning)

If you start for the middle of a band then it will be too short on the lower frequencies from where it was calculated for, or, too long on frequencies higher than where you have calculated it for it.

This becomes quite apparent when you are using lower frequencies such as 160 and 80 meters, just look at the table below on 160 meters! There is 6.5 foot difference per side in from 1.850 to 1.950

If you know that you will only be operating voice then make the antenna closer to the middle of the voice segment . If you know you will be operating digital modes or doing CW then make the antenna for the lower ends of the band where those are commonly found.

A simple chart below to get you started with a dipole antenna:

Band	Frequency	492/ frequency	Each Side Should Be:	468/ frequency	Each Side Should Be:	
160 meters	1.850	265.95	132.97	252.97	126.49	
160 meters	1.900	258.95	129.47	246.32	123.16	
160 meters	1.950	252.31	126.15	240.00	120.00	
120 meters	2.500	196.80	98.40	187.20	93.60	WWV
80 meters	3.330	147.75	73.87	140.54	70.27	CHU
80 meters	3.750	131.20	65.60	124.80	62.40	
60 meters	5.000	98.40	49.20	93.60	46.80	WWV
60 meters	5.375	91.53	45.77	87.07	43.53	
40 meters	7.150	68.81	34.41	65.45	32.73	
40 meters	7.850	62.68	31.34	59.62	29.81	CHU
30 meters	10.125	48.59	24.30	46.22	23.11	
20 meters	14.175	34.71	17.35	33.02	16.51	

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Band	Frequency	492/ frequency	Each Side Should Be:	468/ frequency	Each Side Should Be:	
20 meters	14.670	33.54	16.77	31.90	15.95	
20 meters	15.000	32.80	16.40	31.20	15.60	WWV
17 meters	18.118	27.16	13.58	25.83	12.92	
15 meters	20.000	24.60	12.30	23.40	11.70	WWV
15 meters	21.225	23.18	11.59	22.05	11.02	
12 meters	24.940	19.73	9.86	18.77	9.38	
10 meters	28.500	17.26	8.63	16.42	8.21	
10 meters	28.850	17.05	8.53	16.22	8.11	
10 meters	29.350	16.76	8.38	15.95	7.97	

The blue band names are the frequencies for both WWV and CHU.

To make a vertical antenna, use the “Each Side Should Be” column from the dipole chart above (which is 1/4 wave length) and make your vertical portion out of aluminum tubing to go as high as you are able for the frequency you want to operate on.

Then run as many wires as possible along the ground in a circular fashion. 16 wires is a good starting point although more is better. If possible try for 32 or 48 wires. If they are not going to be buried then attach a quick connect type clip to them in case someone trips on them so the wire doesn’t break and have to be replaced.

For a Yagi beam antenna the formulas are:

For the driven element 468/f

For the reflector (468/f)*1.05

For the space from the reflector to the driven element (1005/f)*0.20

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For the 1st director element (468/f)*.95

For the 2nd director element (468/f)*.90 (if used)

For the 3rd director element (468/f)*.85 (if used)

Each additional director element should be reduced in the formula by 0.05%

For the driven element to director spacing and director to director spacing (1005/f)*0.15

These formulas will give you an antenna that is workable.

Full wavelength formulas:

The formula for a full wave length is 1005/frequency.

To make that into a Quad antenna divide the result by 4,

To calculate the diagonal cross members of a quad antenna being used vertically, use this:

multiply the length of the side (that number you got from dividing by 4) by the square root of 2: diagonal = $\sqrt{2} \times$ side.

Hint: the square root of 2 is equal to: 1.4142

So the formula becomes: diagonal=1.4142 * side

Ingrain this relationship into your brain and heart so that never again will you wonder how to find the diagonal of a square.

The spacing for a quad beam is the same as for a yagi antenna.

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To make a Delta antenna divide the result of the full wavelength formula by 3.

Since a Delta antenna is just an equilateral triangle, to support it you point the top angle down at the ground and put the bottom up in the air as shown in the picture of a delta beam up above.

The simpilest way to support a delta is to make a “T” support.

To figure out how high the delta antenna center support will be use this formula:

$(h) = (a\sqrt{3})/2$; where 'a' is the side of the equilateral triangle.

You can then use this formula to figure out how far to make each angle support from the center

length = side /2

It can be easy to make a single wire Delta antenna but a beam will take a bit of work.
The spacing is the same as for a yagi antenna.

Whatever you try to make, experiment! That is what amateur radio is all about!. You cant learn anything if you don’t try to build your own equipment. And yes that does include making your own feedline.

Think about trying to make your own twin lead. Someday you might need to do that in an emergency.

73

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Below is a great article about how one of our club members, Art Aronsen. started his amateur radio journey many years ago when sending and receiving CW was a requirement for your amateur radio license and you didn't have a volunteer examiner to give you the test, you would have to schedule a test with an agent from the FCC field office closest to where you lived.

CW is Fun Again!

When I first started out as a ham, code was a requirement. It was only 5 wpm and it was a challenge I accepted to get on the air.

The first call sign in 1978 was WN6BQX. It was only good for 1 year. That challenged me to get my general with the 13 wpm code requirement.

My first rig was a Drake 2NT and a couple of crystals for 40 meters with a FT101 as a receiver and a 40 meter dipole.

With nervous anticipation I sent out my first CQ and waited. I only had a couple of crystals for the novice band so after a few more nervous calls I swapped out that crystal for the other one.

A few minutes later I made my first contact at about 6 wpm. I was so nervous I had to have them repeat the call sign and information at least 3 times to get the proper information down.

The bug bite me and I was hooked.

Over the next few months the CW code was my key to getting out and as I made more contacts with other novices, and code practice, life was getting closer to that 13 wpm for my general.

The 13 wpm code was a challenge and the only place in the house I found quiet enough, without being bothered, was the bathroom. Yes, the throne room was off limits to all the calls that came. It seems that when one is on the throne no one wants to bother you until the paperwork is done and you come out refreshed.

So, realizing this I routinely took my small tape recorder and tape into the bathroom and sat on the closed seat of the throne and proceeded to work on my 13 wpm code requirement at least twice an evening.

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I also took the recorder and tape to work and during my lunch break, would spend 15 minutes, while eating, on copying code.

After about 4 months of doing this I went down to the FCC office and took my test, which I passed with flying colors. Shortly after that I got my new call sign, WD6BQX, which I still have to this day.

When I got my general and phone privileges I got a new transceiver, a Kenwood TS 520 and that was the end of my CW days, which I regret now.

After 46 years of being a ham, I am going back to the original means of communication, CW, for at least a part of my radio time.

Why now ? I tried FT8 and it is all computers, there is no personal interface or feel and phone is getting crowded on the bands at times, and people often ignore you unless they need you for a contest or some such thing.

However, the CW portion of the band is wide open with very few on the frequency in any band, and the novice frequencies, they are wide open when conditions are not all that favorable for phone. With CW one can still make the contact barefoot with no amplifier in most cases and at a nice slow relaxed speed as few there are going at any fast pace.

The last reason is the most important in my mind. When a disaster comes, no one is really prepared and if the only thing you can get out is a carrier, on a frequency due to a radio malfunction, you can still get out and get help if you can send CODE.

Just the ability to click the mike in sync with the Morse code will let someone find you if they understand CW. If not, well it is everyone's loss.

So, do you still know your CW code at least at a 5 wpm rate? I sure hope so.

I did not, so I down-loaded from a web site a program that allow me to control all aspects of learning the code, from noise level to speed of character and spacing. It is making a big difference as improvement is coming along very nicely.

G4FON is on the internet, is free and very easy to use.

So get back to the basics of our beginnings and pick up your CW code, just for the fun if it.

The bands are awaiting your CQ.

Art Aronsen, WD6BQX, 73

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The Learning Corner

This months learning corner is about resistors.

We all know what resistors are, they are those small things with colored bands on them in all of our electronics.

They are those things that smell really really bad when they burn up from being overloaded.

There are many types of resistors; wire would , carbon, potentiometers, thermistors, just to name some of the variety of them.

They even have their own schematic symbol:

Resistor	

And a variable resistor, also called a rheostat, has its own symbol as well:

Rheostat		

A resistor is made to resist the flow of electricity and alter the current flow into a circuit.

And if you know the color code of resistors then you will always be able to ‘read’ them by sight alone. (provided of course they aren't burned to a crisp).

On the next page is the resistor color chart:

There is even a magical formula that will help you understand resistance and how it affects both current and voltage, and you needed to know it for your Technicians license.

That formula is: OHM’s Law!!!

Continued on the next page.

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You do remember these calculations don’t you?

$E = IR$

$I = E / R$

$R = E / I$

We will get into ohms law in another Learning Corner lesson

Look in your ARRL handbook and there is a wealth of information about electrical components in it.

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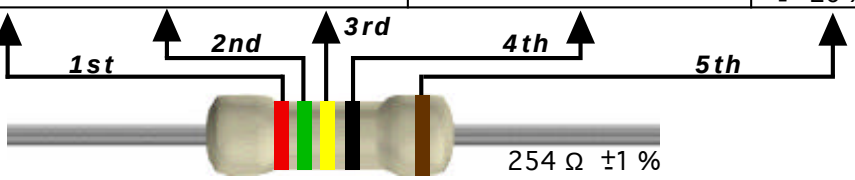
RESISTOR COLOR CODE GUIDE

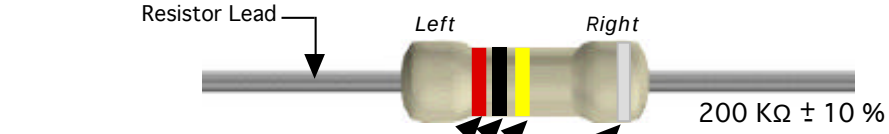
4- Band Code

Color	1st Band	2nd Band	3rd Band	Decimal Multiplier		Tolerance
Black	0	0	0	1	1	
Brown	1	1	1	10	10	± 1 %
Red	2	2	2	100	100	± 2 %
Orange	3	3	3	1K	1,000	
Yellow	4	4	4	10K	10,000	
Green	5	5	5	100K	100,000	
Blue	6	6	6	1M	1,000,000	
Violet	7	7	7	10M	10,000,000	
Gray	8	8	8		100,000,000	
White	9	9	9		1,000,000,000	
Gold					0.1	± 5 %
Silver					0.01	± 10 %
None						± 20 %



5- Band Code

Calculation



First Band **Red ---------- 2**
Second Band **Black ---------- 0**
Multiplier Band **Yellow -- x10,000**
Tolerance Band **Silver -------10 %**

The Gold or Silver band is always placed to the right.
The resistor value is read from the left to right.

If there is no tolerance band, then find the side that has a band closest to a lead and make that the first band.

Equation

20 x 10,000 = 200,000

1,000 = 1K

Resistor = 200 KΩ
with a ± 10 % Tolerance

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FEMA and ICS Training

As all of you are aware, the Federal Government has many agencies. One of those agencies charged with assisting people during emergencies is F.E.M.A.. They are charged with assisting people right after a disaster occurs. They use the assistance of volunteers from the community for this purpose. Businesses, service groups such as the Red Cross etc, even amateur radio operators are used to assist them in their mission.

They have created the Incident Command System to train people to be ready for emergencies and be able to interact with public safety officials and assist them in their mission.

The incident command system is a structured system of who is responsible for what aspects of the emergency and who answers to what person during the emergency.

But the Incident Command System is much more than just for emergencies. It can also be used for pre-planning events so things should go smoothly.

F.E.M.A. offers courses both online and downloadable PDF's that you can read and work from to get certified to assist in emergencies and public events.

There are 4 core courses that should be taken by every amateur radio operator and those are:

ICS-100 An introduction to the Incident Command System.

ICS 100, Introduction to the Incident Command System, introduces the Incident Command System (ICS) and provides the foundation for higher level ICS training.

This course describes the history, features and principles, and organizational structure of the Incident Command System. It also explains the relationship between ICS and the National Incident Management System (NIMS).

ICS-100: Introduction to the Incident Command System

Continued on the next page.

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IS-200 Incident Command System for Single Resources and Initial Action Incidents

IS200, Basic Incident Command System for Initial Response, reviews the Incident Command System (ICS), provides the context for ICS within initial response, and supports higher level ICS training.

This course provides training on, and resources for, personnel who are likely to assume a supervisory position within ICS.

ICS-200: ICS for Single Resources and Initial Action Incidents

IS-700 National Incident Management System An Introduction

This course provides an overview of the National Incident Management System (NIMS). The National Incident Management System defines the comprehensive approach guiding the whole community - all levels of government, nongovernmental organizations (NGO), and the private sector - to work together seamlessly to prevent, protect against, mitigate, respond to, and recover from the effects of incidents.

The course provides learners with a basic understanding of NIMS concepts, principles, and components.

IS-700: National Incident Management System, An Introduction

Continued on the next page.

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IS-800 National Response Framework, An Introduction

The goal of the IS-0800.d, National Response Framework, An Introduction, is to provide guidance for the whole community. Within this broad audience, the National Response Framework focuses especially on those who are involved in delivering and applying the response core capabilities, including:

Private sector partners
Non-governmental organizations (NGOs)
Government officials
Community leaders
Emergency management practitioners
First responders

IS-800: National Response Framework, An Introduction

Next month we will break down the first component, ICS-100 Indroduction to the Incident Command System.

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Recurring Club Meetings and Events

This is a listing all events of the club that repeat monthly

The club net is on March 5, 12, 19, 26 at 2000 hours using the W6VVR Repeater

The club meeting is March 14th at 1900 hours using the Vacaville Nut Tree Airport Meeting Room

The club Cow Town casual QSO is on March 7, 14, 21 and 28 at 1030 hours on the W6VVR Repeater.

Saturday March 16th at 1900 hours KK6ZJC will be using zoom to practice passing messages.

KK6ZJC can be reached by email at coffeeholic1a@yahoo.com. Please put ECOMM TRAINING ENQUIRY in the subject

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Special Club Meetings and Events

I am listing all special events the club is looking for volunteers to assist in as well as fox hunts or events out of the ordinary.

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Contest for March

Below is link to a great contesting website by fellow Amateur Radio Operator Bruce Horn, WA7BNM

https://contestcalendar.com/

The calendar list contest in multiple ways.

It is easy to use and regularly updated.

Hope that it helps you with your contesting!

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The Club Repeater(s)

The Vaca Valley Radio Club sponsors repeaters on several bands.
The club provides some financial support, but the owners provide a substantial portion of the cost of their operation.
The efforts of the owners are greatly appreciated.

The main repeater for the club is:

Call Sign: W6VVR
Output Frequency: 145.470MHz
Input Frequency: 144.870MHz
CTCSS tone (P.L.): 127.3Hz
Offset Frequency: 600KHz
Offset Direction: Minus

Vaca Valley Radio Club Sponsored Repeaters
As Of November 1, 2023

Rptr Out	Offset	P.L.	Call/ Location	Linked Repeaters
145.470	Minus 600 KHz	127.3	W6VVR Mt Vaca	Linked to 441.650 MHz
440.025	Plus 5 MHz	127.3	WV6F Mt Vaca	
441.650	Plus 5 MHz	100.0	N6VLF Fairfield	Linked to 145.470 MHz
145.140	Minus 600 KHz	77.0 DG-ID 00-00	Moderate level	Can operate Yaesu Fusion AMS Can be linked to 145.470 MHz or 441.650 MHz

Visitors are welcome to use the repeaters.

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EchoLink and AllStar Nodes

The Vaca Valley Radio Club operates both an EchoLink and an Allstar Nodes that link to the clubs main repeater on 145.470 MHz on top of Mt Vaca.

NOTE: EchoLink is UP, Allstar node is UP.

Call Sign: W6VVR

EchoLink Node 454312 W6VVR-R

Allstar Node 51094

Visitors are welcome to use the nodes.

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2024 Officers:

President:	Servando Miramontes	K6SRV
Vice President:	Dan Martin	N6ETR
Treasurer:	Brian Steinberg	KB0A
Secretary:	Mike Rodgers	KN6MIO

2024 Board of Directors:

Art Aronsen	WD6BQX
Chris Swanson	KJ6DLF
Mike Gregory	WB6WYF
Will Shaffer	W6SRX

Net Control Operators

1st Week Of The Month	Bob Hawkins	KM6BXZ
2nd Week Of The Month	Chris Swanson	KJ6DLF
3rd Week Of The Month	Frank Garay	KJ6RWQ
4th Week Of The Month	Dan Martin	N6ETR
5th Week Of The Month	Dan Martin	N6ETR

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VOLUNTEER POSITIONS:

Membership	Bryan Steinberg	KB0A
Repeater Trustee	Brian Hagen	KK6BXP
Repeater Committee Chair	Brian Hagen	KK6BXP
Newsletter Editor	Stephen Bartels	KK6ZJC
Webmaster	Bryan Steinberg	KB0A
Net Control Coordinator (Filled by the Vice President as per the Club Constitution)	Dan Martin	N6ETR
Activities Committee Chair	Don Preston	KM6INR
Monthly Message Passing Practice Net	Stephen Bartels	KK6ZJC
Foxhunt Coordinator		
Bicycle Events Coordinator		
Parade Events Coordinator		
Winter Field Day Committee		
Dixon Mayfair Parade		
June Field Day Committee		
Merriment on Main		
December Meeting		

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Volunteer Positions (Continued)

Winlink Committee Chair

FL-Digi Committee Chair

Arden Committee Chair

We still have numerous committees that need chairpersons and volunteers for the upcoming year (2024). (See the list above.) They need to be filled for the upcoming year by younger volunteers and those with experience to guide the club forward into the future.

This is your club. You can make it a great club by participating in meetings, events, and nets, or you can watch the club wither away and die from lack of participation by ALL members.

It is in your hands, are you going to watch the club end or are you going to jump in and help steer the club forward to the future?

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Vaca Valley Radio Club, Inc

Membership Application/Renewal Form

November 2019 Dues are payable annually.

New Members Please Fill in All Fields Completely
Renewing Members Please Provide Name and Call Sign, Other Fields *Only if there are changes*

Member Information

FCC Name:_____

Street:_____

Street 2:_____

City:_____

State:_____ Zip-Code+4:_____

Home Phone:_____

Cell Phone:_____

Call Sign:_____

License Class:_____

ARRL Member?_____

Member No:_____

Name Badge Name_____

Payment Information

Member Dues: $25.00 _____

Additional Family Members: $2.00 _____

Student: $5.00 _____

Repeater Donation: _____

Total:_____$_____

Paid by Check: $_____

Check number: _____

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Family Member (Spouse or Children)

FCC Name:_____

Call Sign:_____

License Class:_____

ARRL Member?_____

Member No:_____

Name Badge Name_____

Family Member (Spouse or Children)

FCC Name:_____

Call Sign:_____

License Class:_____

ARRL Member?_____

Member No:_____

Name Badge Name_____

Family Member (Spouse or Children)

FCC Name:_____

Call Sign:_____

License Class:_____

ARRL Member?_____

Member No:_____

Name Badge Name_____

Family Member (Spouse or Children)

FCC Name:_____

Call Sign:_____

License Class:_____

ARRL Member?_____

Member No:_____

Name Badge Name_____

Family Member (Spouse or Children)

FCC Name:_____

Call Sign:_____

License Class:_____

ARRL Member?_____

Member No:_____

Name Badge Name_____

Family Member (Spouse or Children)

Name:_____

Call Sign:_____

License Class:_____

ARRL Member?_____

Member No:_____

Name Badge Name_____

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Directions To the Monthly Meeting from Fairfield, Suisun City And Other Areas West of Vacaville

Coming from Fairfield: Take Highway 80 East Bound. Take exit 55 Nut Tree Parkway / Allison Drive. Stay to the left and enter the right left turn lane

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Turn left from the right turn lane and stay in the right lane. Be careful not to get back on the highway entrance.

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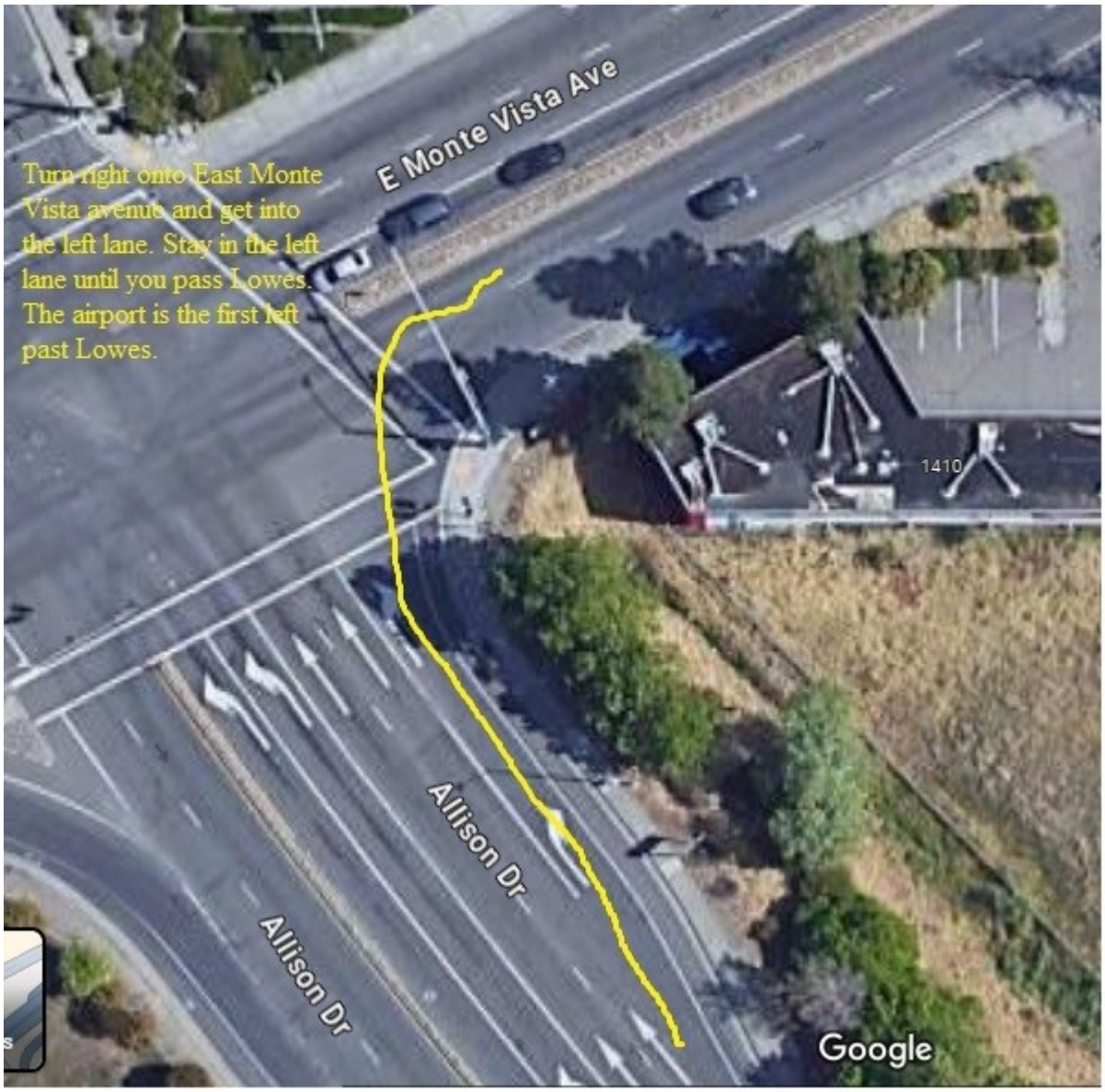
Go over the overpass and make the right turn onto East Monte Vista Avenue.



Get in the left lane of E Monte Vista Avenue and drive East until you pass Lowes.

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The airport is immediately past the Lowes Parking lot.

Turn left and drive to the airport parking lot on your right.

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Directions To The Monthly Meeting From Dixon, Sacramento And Other Areas East of Vacaville

Coming West from Dixon take the E Monte Vista Avenue exit, (exit 55)

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Take the Right turn Lane at the exit

Stay in the right lane until the light.
At the light turn Right and get into the left lane.

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Get into the left lane and drive East until you see Lowes.
The airport is immediately past the Lowes parking lot

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Turn left and drive to the airport parking lot on your right.

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